Rejection under 35 U.S.C. § 112

Application No.: 10/700,110

Claims 4 and 5 are rejected under 35 U.S.C. § 112, second paragraph as being indefinite. Specifically, the Examiner has identified an antecedent basis issue in claim 4. Claim 5 depends from claim 4 and is asserted to be indefinite by its association with claim 4.

REMARKS

Applicant has amended the dependency of claim 4 to currently depend from claim 3. The change in dependency has corrected the antecedent basis issue. Accordingly, Applicant respectfully requests the Examiner to withdraw the rejection under 35 U.S.C. § 112, second paragraph.

Rejection under 35 U.S.C. § 102(b)

Claims 1, 2, 12, 14, and 15 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,590,950 (hereinafter referred to as "Iwaszkiewicz").

Applicant has amended independent claims 1 and 15. The amendment is supported by the original application. No new matter has been entered. Also, claim 14 is cancelled and, hence, the rejection of claim 14 is not addressed.

Claim 1 recites:

- a) providing a cable portion, including a plurality of first conductive wires set into a length of insulative material having a surface, wherein the plurality of conductive wires are disposed at substantially the same radial depth within the insulative material:
- b) removing a portion of said insulative material from said surface of said length of said conductive wires, thereby creating an exposed first wire surface;
- c) electrically connecting a second conductive wire to said exposed first wire surface; and
- d) placing a preformed conductive ring onto said cable portion and electrically connecting said second conductive wire to said conductive ring.

Claim 15 recites:

- a) providing a cable portion, including a plurality of first conductive wires set into a length of insulative material having a surface, wherein the plurality of conductive wires are disposed at substantially the same radial depth within the insulative material;
- b) removing a portion of said insulative material from said surface of said length of insulative material to only a first one of said first conductive wires at a first location, thereby creating a first exposed first wire surface and removing a portion of said insulative material from said surface of said length of insulative material, also only to said first one of said first conductive wires at a second location, thereby creating a second exposed first wire surface;
- c) electrically connecting a second conductive wire to said first exposed first wire surface; and
- d) wrapping said second conductive wire about said cable portion and connecting it to said second exposed first wire surface, thereby creating a circumscribing electrode.

Iwaszkiewicz discloses an electrode fabrication process in which a hollow polymer tube is initially provided. Multiple apertures are formed in the polymer tube and "bridging conductors" are inserted through the apertures. See FIG. 3 of Iwaszkiewicz. Then, a single coiled conductor is inserted through the polymer tube thereby causing the bridging conductors to be bent and to rest along a length of the coiled conductor within the tube. The portions of the bridging conductors that are left exterior to the tube are also bent to accommodate a ring electrode. See FIG. 5c of Iwaszkiewicz.

The fabrication process of Iwaszkiewicz does not anticipate claims 1 or 15.

Applicant notes that the coiled conductors of Iwaszkiewicz are not "set" into a length of insulative material. Specifically, within the art, the term "set" has a definite, well-accepted meaning to those of ordinary skill that requires a "settable" material to fixedly encapsulate the respective element ("conductive wires" as recited by claims 1 and 15). In Iwaszkiewicz, the coiled conductors are merely manually placed within the polymer tube. Also, as recited in claims 1 and 15, the plurality of conductors are set within the insulative material, before a portion of the insulative material is removed and the second conductive wire is coupled to the first interior conductive wire. Iwaszkiewicz initially creates apertures before the conductors are provided. Furthermore, although there are two conductors shown in Iwaszkiewicz, there are no plurality of conductive wires at the substantially the same depth in Iwaszkiewicz.

Instead, one of the coiled conductors of Iwaszkiewicz is placed within the other coiled conductor.

Claims 1 and 15 are anticipated by Iwaszkiewicz. Claims 2 and 12 depend from claim 1 and, hence, are also not anticipated by Iwaszkiewicz.

There is also no basis to modify or adapt Iwaszkiewicz according to the claimed subject matter. Specifically, there is no teaching or suggestion in Iwaszkiewicz how the disclosed fabrication process could be adapted so that the bridging conductors could be limited so as to only electrically coupled with a single conductive wire of a plurality of conductive wires at substantially the same depth within the insulative material as required by claims 1 and 15. Additionally, there is no teaching or suggestion how to properly insert the bridging conductors into a cable that already has the conductive wires set within the insulative material of the cable.

Rejections under 35 U.S.C. § 103(a)

Claims 3 and 13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Iwaszkiewicz et al. in view of U.S. Patent No. 5,514,172 (hereinafter referred to as "Mueller").

Claims 4-7, 9, and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Iwaszkiewicz et al. in view of U.S. Patent No. 6,505,401 (hereinafter referred to as "Doan").

Claims 8 and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Iwaszkiewicz et al. in view of U.S. Patent No. 5,251,643 (hereinafter referred to as "Osypka").

To establish a prima facte case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the applied reference (or references when combined) must teach or suggest all the

claim limitations. See MPEP § 2143. Applicant respectfully submits that the applied references do not satisfy these criteria.

Claim 1 recites:

- a) providing a cable portion, including a plurality of first conductive wires set into a length of insulative material having a surface, wherein the plurality of conductive wires are disposed at substantially the same radial depth within the insulative material:
- b) removing a portion of said insulative material from said surface of said length of insulative material to only one of said conductive wires, thereby creating an exposed first wire surface:
- c) electrically connecting a second conductive wire to said exposed first wire surface; and
- d) placing a preformed conductive ring onto said cable portion and electrically connecting said second conductive wire to said conductive ring.

Claim 15 recites:

- a) providing a cable portion, including a plurality of first conductive wires set into a length of insulative material having a surface, wherein the plurality of conductive wires are disposed at substantially the same radial depth within the insulative material:
- b) removing a portion of said insulative material from said surface of said length of insulative material to only a first one of said first conductive wires at a first location, thereby creating a first exposed first wire surface and removing a portion of said insulative material from said surface of said length of insulative material, also only to said first one of said first conductive wires at a second location, thereby creating a second exposed first wire surface;
- c) electrically connecting a second conductive wire to said first exposed first wire surface; and
- d) wrapping said second conductive wire about said cable portion and connecting it to said second exposed first wire surface, thereby creating a circumscribing electrode.

For the reasons discussed above in regard to claims 1 and 15, Iwaszkiewicz does not teach or suggest the limitations of claims 1 and 15.

In regard to Mueller, Mueller merely discloses a conventional lead for cardiac stimulation in which a coiled conductor is coupled to a ring electrode. See FIG. 4 of Mueller. Mueller does not teach or suggest the fabrication process of claims 1 and 15.

Doan discloses a fabrication process in which conductors are threaded through respective lumens in a cable and exit from the lumens through respective apertures.

Accordingly, Doan does not teach or suggest a plurality of conductive wires that are "set" within insulative material of a cable as required by claims 1 and 15. Also, Doan does not teach or suggest removing a portion of the insulative material to expose a conductive wire that is already present and set within the insulative material.

Thus, the applied references (either alone or in combination) do not teach or suggest each and every limitation of claims 1 and 15. Claims 3-11 and 13 depend from claim 1 and, hence, inherit all limitations of claim 1. A prima facie case of obviousness has not been established for these claims.

Conclusion

Applicant respectfully submits that the application is in condition for allowance and requests the Examiner to pass the application to issue.

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Respectfully submitted,

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